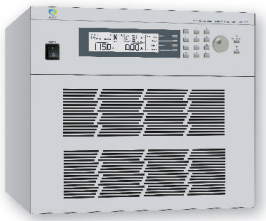
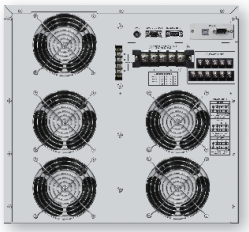
EAC Series Programmable 1 Phase/3 Phase AC Power Source





The EAC series is a single workstation that is capable capable of outputting single-phase, tri-phase, and DC power independently. The new technology Ext Trigger feature synchronize waveforms effortlessly for any analysis purpose. Free from the restrictions imposed by any power system mode, thus it is suitable for all kinds of power source system use in laboratories and R&D departments.

Key Highlight

- Programmable 1Ø/3Ø/DC output power in a single unit.
- Adjustable starting and ending angle of the output waveform to simulate any circumstances.
- Built-in active power factor correction (PF>0.97) for energy saving.
- Withstand inrush current up to 4 times rated current, suitable for any high inrush current loads (motor, compressor, etc.).
- Transient function to simulate voltage variation.
- Synchronic signal output (ON/OFF/EVENT/ Ext Trigger) function is a handy tool for external monitoring, triggering use, and power analysis.

Protection

- Over Current Protection
- Over Voltage Protection
- Over Power Protection
- Over Temperature Protection
- Short Current Circuit
- Reverse Current Protection

Safety and Productivity Features

- OC Fold
- Continuous
- Angle Setting
- V Sense

Available Interface

- USB
- RS-232
- Ethernet (optional)
- GPIB (optional)

	AC Output	DC Output	Programmable	Single-phase Input	3-phase Input	Power Factor Correction circuit	Single-phase Output	1Φ3W Output	3-phase Output	600V Output
EAC-303	✓	✓	✓	✓	-	✓	✓	✓	✓	1Φ3W
EAC-306	✓	✓	✓	✓	✓	✓	✓	✓	✓	1Φ3W

EAC Series Specifications

MODEL			EAC-303	EAC-306
AC OUTPUT				
Phase			1Ø, 3Ø	
Power Rating	1Ø2W		3kVA	6kVA
	1Ø3W		2kVA	4kVA
	3Ø4W		3kVA	6kVA
Voltage	Range	1Ø2W	0.0 - 300Vac, 150/300V Auto Range	
		1Ø3W	0.0 - 300V (phase), 0.0 - 600V (line), 150/300V Auto Range	
		3Ø4W	0.0 - 300V (phase), 0.0 - 520V (line), 150/300V Auto Range	
	Resolution		0.1V	
	Accuracy		±(0.2% of setting + 3 counts)	
Max. Current (r.m.s)[1]	1Ø2W	0 - 150V	27.6A	55.2A
		0 - 300V	13.8A	27.6A
	1Ø3W	0 - 150V	9.2A	18.4A
		0 - 300V	4.6A	9.2A
	3Ø4W	0 - 150V	9.2A	18.4A
		0 - 300V	4.6A	9.2A
Frequency	Range		40 - 1kHz Full Range Adjust	
	Resolution		0.1Hz at 40.0 - 99.9Hz , 1Hz at 100 – 1kHz	
	Accuracy		± 0.03% of setting	
Total Harmonic Distortion (THD)			<0.3% at 110/220V & 50/60Hz (Resistive Load)	
Inrush Current			4 times rated Current (r.m.s)	
Crest Factor			3 times rated Current (r.m.s)	
Line Regulation			± 0.1V	
Load Regulation			±(1% of output + 1V) at Resistive Load , < 400µS response time	
DC OUTPUT				
Power rating			3kW	6kW
Voltage	Range		0 - 210V/0 - 420V Selectable	
	Resolution		0.1V	
	Accuracy		±(0.2% of setting + 3 counts)	
Max. Current (r.m.s)	0 - 210V		14.4A	28.8A
	0 - 420V		7.2A	14.4A
Ripple and Noise (r.m.s)	Range	L	< 700mV	
		H	< 1100mV	
Ripple and Noise (p-p)			< 4.0Vp-p	
Line Regulation			± 0.1V	
Load Regulation			±(1% of output + 1V) at Resistive Load , < 400µS response time	

MODEL				EAC-303	EAC-306
INPUT					
Phase				1Ø	1Ø or 3Ø
Voltage				200 - 240Vac ± 10%	1Ø : 200 - 240Vac ± 10% 3Ø3W : 200 - 240Vac ± 10% 3Ø4W : 346 - 416Vac ± 10%
Max. Current				23A	1Ø : 45A 3Ø3W : 26A 3Ø4W : 15A
Frequency				47 - 63Hz	
Power Factor				0.97	
MEASUREMENT					
Voltage	Range			0.0 - 420.0V	
	Resolution			0.1V	
	Accuracy (AC)[2]			±(0.2% of reading + 3 counts)	
	Accuracy (DC)[2]			±(0.2% of reading + 5 counts)	
Current	Range	1Ø2W		0.05 - 39.00A	0.05 - 78.00A
		1Ø3W	L	0.005 - 1.200A	0.005 - 2.400A
			H	1.00 - 13.00A	2.00 - 26.00A
		3Ø4W	L	0.005 - 1.200A	0.005 - 2.400A
			H	1.00 - 13.00A	2.00 - 26.00A
	Resolution[3]		L	0.001A	
			H	0.01A	
	Accuracy[4]			±(1% of reading + 5 counts)	
Current (DC)	Range			0.05 - 19.50A	0.05 - 39.00A
	Resolution			0.01A	
	Accuracy[2]			±(1% of reading + 5 counts)	
Frequency	Range			0.0 – 1kHz	
	Resolution			0.1Hz	
	Accuracy			± 0.1Hz (501 - 1kHz, Accuracy ±0.2Hz)	
Power (AC)	Range	1Ø2W		0 – 3900W	0 - 7800W
		1Ø3W	L	0.0 - 120.0W	0.0 - 240.0W
			H	100 – 1300W	200 – 2600W
		3Ø4W	L	0.0 - 120.0W	0.0 - 240.0W
			H	100 - 1300W	200 – 2600W
	Resolution[3]		L	0.1W	
			H	1W	
	Accuracy[2]	1Ø2W		±(2% of reading + 5 counts) at 40.0 - 500Hz and PF ≥ 0.2 ±(2% of reading + 15 counts) at 501 - 1kHz and PF ≥ 0.5	
		1Ø3W	L	±(2% of reading + 15 counts) at 40.0 - 500Hz and PF ≥ 0.2 ±(2% of reading + 30 counts) at 501 - 1kHz and PF ≥ 0.5	
			H	±(2% of reading + 5 counts) at 40.0 - 500Hz and PF ≥ 0.2 ±(2% of reading + 15 counts) at 501 - 1kHz and PF ≥ 0.5	
		3Ø4W	L	±(2% of reading + 15 counts) at 40.0 - 500Hz and PF ≥ 0.2 ±(2% of reading + 30 counts) at 501 - 1kHz and PF ≥ 0.5	
			H	±(2% of reading + 5 counts) at 40.0 - 500Hz and PF ≥ 0.2 ±(2% of reading + 15 counts) at 501 - 1kHz and PF ≥ 0.5	

MODEL		EAC-303	EAC-306
Power (DC)	Range	0 - 3.9kW	0 - 7.8kW
	Resolution	1W	
	Accuracy2	±(2% of reading + 5 counts)	
GENERAL			
Transient (only for 40 - 70Hz)		Trans-Volt 0.0 - 300.0V, Resolution 0.1V Trans-Site 0° - 359°, Resolution 1° Trans-Time 0.5 - 999.9ms, Resolution 0.1ms Trans-Cycle 0 - 9999, 0 = Constant	
Remote Input Signal Interface		Test, Reset, Interlock, Recall program memory 1 through 7	
Remote Output Signal		Pass, Fail , Test-in Process	
I/P Terminal		Terminal	
Memory		50 memories, 9 steps/memory	
Sync Output Signal		ON/OFF/EVENT/Ext Trigger in the Program mode, Output Signal 5V, BNC type, Between the sync signal and the output voltage will be 0.5ms time difference	
Display		240 x 64 dot resolution Monographic LCD/Contrast 9 Levels 1 - 9	
Protection		OCP, OVP, OPP, OTP, LVP, Short Circuit, Reverse Current ; Alarm and shutdown	
Interface5		Standard USB & RS232, Optional GPIB, Ethernet	
Op./Non-Op. Temp./Humidity		0 to 40°C/-40 to 75°C/20 to 80%RH	
Dimension (W x H x D), mm6		430 x 400 (487) x 500 (560)	
Weight		48kg	57kg
INBOX ACCESSORIES			
1224 USB Cable*1; 1505 Interlock Disable Key*1			

***Product specifications are subject to change without notice**

1. Maximum current when output voltage at 110V/220V.
2. At Voltage > 5V.
3. a. When output frequency ≧ 100Hz & ≤500Hz & N-G short, the current meter guarantee minimum current from 0.01A.
   b. When output frequency ≧ 500Hz & N-G short, the current meter guarantee minimum current from 0.02A.
   c. When output frequency ≧ 100Hz & ≤500Hz & N-G short, the current meter guarantee minimum current from 0.02A at 600V models.
   d. When output frequency ≧ 500Hz & N-G short, the current meter guarantee minimum current from 0.03A at 600V models.
4. At CF < 1.5, Current (peak) ≤ 75%, Voltage > 5V.
5. Only one interface can be selected among RS232 & USB, GPIB & Ethernet interface card.
6. Figure in parentheses are maximum values with fixture stand.

Models

- EAC-303 Programmable AC Power Source 0 - 300V/ 40 - 1kHz (3kVA)
- EAC-306 Programmable AC Power Source 0 - 300V/40 - 1kHz (6kVA)

Options

- OPT.109 Replace RS232 Interface by GPIB Interface